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	C	ase 2:0	1-cv-0	0132-JCC	Document 252-1	Filed 03/17/2004	Page 3 of	f 57
1			5.	-	tial crop reductions w kport market 27	ill impact national avai	ilability and	the
2			6.			acent to waterways; if subject to future subdi-	_	28
3 4	:		7.	Chemical	use allows farmers to	produce crops more co projects that enhance sa	conomically;	
5			8.	Reducing	the amount of land av	ailable for farming ma	y result in th	e loss
6		C.	The I		0	Jeopardy To Salmonid	Species	31
7			1.			at the section 7 proced	-	
8				implicates		g obligation to avoid je	opardizing	•
9			2.		s generic risk assessm gton State's agricultur	ent model does not appral regions 35	oly to the cor	ndition
10			3.	The Plaint harm salm		t show that current agi	ricultural pra	ctices
11		D.	Addi	tional Sugge:	stions To Modify The	Scope Of The Injuncti	ion 45	
12 13			1.	friendly, w	eb-based system which	njunction until the EPA ch enables a landowne n falls within the scope	r to determin	le
14 15			2.	deemed cri	itical to Washington a	eterminations in order gricultural industry an gricultural activity occu	d focus on th	
16	! !		3.		_	or the use of all herbici		
17	•		4.		_	es when salmon are ac		am
18			5.			A assigns a "may effec nich allows chemical u		,
19	!			subsequent	tly issues a 7(d) determ	nination 49		
20	IV.	CONCLUSIO		ON 50				
21								
22								
23								

#### I TABLE OF AUTHORITIES CASES 2 Azinphos-Methyl, Revocation and Lowering of Certain Tolerances, 3 65 F.R. 38748, 38749 (June 22, 2002) 4 Bays Legal Fund v. Browner, 828 F.Supp. 102 (D. Mass. 1993) 34, 35 5 Critical Habitat for 19 Evolutionarily Significant United of Salmon and Steclhead in 6 Washington, Oregon Idaho, and California, 65 F.R. 7764, 7764 (Feb. 16, 2000) 7 Federal Election Comm'n v. Furgatch, 869 F.2d 1256, 1263 (9th Cir. 1989) 8 6 9 Goldic Electrical Inc. v. Loto Corp., Civ. No. 01-7103, 2001 WL 1511811 (2nd Cir. Nov. 27, 2001) quoting Sanders v. Air Line Pilots Ass'n Int'l, 473 F.2d 244, 247 (2nd Cir. 1972) 13 10 Granny Goose Foods, Inc., v. Brotherhood of Teamsters, 11 415 U.S. 423, 444 (1974) 12 Greenpeace v. National Marine Fisheries Service, 106 F.Supp.2d 1066 (W.D. Wash, 2000) 13 Hallauer v. Spectrum Properties, Inc., 14 18 P.3d 540, 543 (Wash, 2001) 15 Int'l Longshoremen's Ass'n v. Philadelphia Marine Trade Ass'n, 389 U.S. 64, 76 (1967) 16 <u>Lopez v. Heeckler,</u> 17 713 F.2d 1432, 1435 (9th Cir. 1983) 18 National Association of Home Builders et al. v. Evans, Case No. 1:00-CV-02799 (Consent Decree, D.D.C., April 30, 2002) 19 Natural Resources Defense Council v. U.S. DOI. 275 F.Supp. 2d 1136 (C.D. Cal. 2002) 20 Nevada Airlines, Inc. v. Bond, 21 622 F.2d 1017, 1018 n. 3 (9th Cir. 1980) 22 North Slope Borough v. Andrus, 486 F.Supp. 332, 357 (D.D.C. 1980) 33 23 Mentor Law Group, PLLC 1100 Market Place Tower 24 MOTION TO STAY AND MODIFY JANUARY iii 2025 First Avenue Seattle, Washington 98121 TEL 206.493.2300 FAX 206.493.2310 22,2004 ORDER AND MEMORANDUM IN SUPPORT

Document 252-1 Filed 03/17/2004

Page 5 of 57

Case 2:01-cv-00132-JCC

SUPPORT

1	RCW §§ 90.14.130, 90.14.140 31									
2	RULES AND REGULATIONS									
3	65 Fcd.Reg. 7764 35									
4	Fed.R.Civ.P. 62(e) 3									
5	Fcd.R.Civ.P. 65(d) 4									
	H.R. Rep. No. 939, 1998 U.S.C.C.A.N. 3474, 3475 14									
6										
7	OTHER AUTHORITIES									
8	"All-H Paper." http://www.salmonrecovery.gov/strategy.shtml, 31									
9	An Ecosystem Approach to Salmonid Conservation, §1.5.3(Dec.1996)  see http://www.nwr.noaa.gov/1habcon/habweb/habguide/ManTech/ chap1.htm 16									
10	Andrew P. Morriss & Roger E. Meiners, Market Principles for Pesticides, 28 Wm. & Mary Envtl. L. & Pol'y Rev. 35, 40 (2003) 15									
11										
12	Craig D. Osteen, The Policy and Economic Issues of Pest Control and Energy Use, in Energy in Plant Nutrition and Pest Control 271-72 (Zane R. Helsel ed., 1987) 15									
13	David Pimental et al., Environmental and Economic Effects of Reducing Pesticide Use in									
14	Agriculture, 46 Agric., Ecosystem & Env't 273, 274 (1993) 15									
15	E. Meiners, 28 Wm. & Mary Envtl. L. & Pol'y Rev. at 43 15  Environmental Protection Agency, Endangered Species Pesticide Program, www.epa.gov/opp/fead1/endangere/wtc/index.html 12									
16										
17	Environmental Protection Agency, Endangered Species Pesticide Program, www.epa.gov/opp/fcad1/endangere/wtc/qs-as.htm 12									
18	Federal Caucus, Conservation of Columbia Basin Fish, Final Basinwide Salmon Recovery									
ا وا	Strategy, (December, 2000) 32									
20	J.D. Mumford, A Study of Sugar Beet Growers' Pest Control Decisions, 97 Annals Applied Biology 243, 248 (1981) 15									
21	U.S. Department of Commerce, Northwest Regional Office, Protected Resources Division:									
22	almon ESU maps, http://www.nwr.noaa.gov/1salmon/salmesa/mapswitc/htm 8									
23	W. Erickson & L. Turner, EPA, Azinphos-methyl Analysis of Risks to Endangered and Threatened Salmon and Steelhead (July 23, 2003) 40									
24	MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT  Mentor Law Group, PLLC 1100 Market Place Tower 2025 First Avenue Seattle, Washington 98121 TEL 206,493,2300 FAX 206,493,2310									

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Stay this Court's January 22, 2004 Order awarding Injunctive Relief to Plaintiffs pending appeal to the Ninth Circuit. The aforementioned Defendant-Intervenors also respectfully request this Court to modify its Injunctive Order using the suggestions offered in this memorandum. In support of this Motion, Defendant-Intervenors state the following:

1. INTRODUCTION

State Potato Commission, and files this Motion and Memorandum in Support of its Motion to

COMES NOW, Defendant-Intervenors Washington State Farm Bureau and Washington

On January 22, 2004, this Court issued an Order enjoining the Environmental Protection Agency ("EPA") from authorizing the use of pesticides, herbicides and fungicides (collectively "chemicals") on agricultural crops within 20 yards (100 yards for acrial applications) of any "salmon supporting waters" within the range of listed salmon. This Court's Order should be stayed pending appeal for three reasons, described below in this brief. First, there is no evidence that the current use of these chemicals poses a significant risk to salmon. Second, this Court's Order fails to recognize the enormous damages which farmers will suffer, and balance that actual irreparable harm against the little to no potential risk of harm to salmon. Last, practical application of this Court's Order is not feasible, creating a significant amount of uncertainty for those impacted by it.

This Court based its Order on the assumption that all applications of all chemicals at all times and under all circumstances within these buffers pose a significant risk of harm to salmon. This assumption is based on the EPA's risk assessment model. This assumption is in error because the EPA's model is simply inapplicable to Washington State. Moreover, actual, on-the-ground data regarding the current impact of agricultural chemicals on salmon demonstrates that the chemicals in question rarely even make it into salmon streams at levels that harm individual fish, let alone jeopardize the species under the Endangered Species Act, provided the farmer follows the EPA's application instructions. If

MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

chemicals are not making it into salmon habitat under current use, then the imposition of a buffer zone will have no additional benefit for salmon, and an injunction is unnecessary. Supporting the notion that current chemical use is not harming salmon is the fact that there are no documented fish kills nor are there indications of sub-lethal harm in the impacted area resulting from the proper use of agricultural chemicals.

In stark contrast, the imposition of buffer zones will have an enormous impact on farmers in the affected area. In most cases, crops acceptable to current markets cannot be produced without the use of chemicals. Even if they could be, crop yields would be impacted to the point where the farmer's business is no longer profitable. Importantly, this Court's Order will have impacts far beyond the buffer zone itself; if farmers cannot use chemicals within the buffer zone, the buffer zone will become a harbor for pests, weeds and disease, forcing the farmer to destroy the entire crop or orchard within the buffer zone. Compounding this problem is the fact that this Court's Order is unworkable in a practical sense, leaving the average farmer at a loss to understand when he is in compliance. The bottom line is that this Court's Order is going to cripple agriculture.

Finally, even if this Court decides not to stay its Order, the Washington State Farm Bureau and the Washington State Potato Commission respectfully requests that this Court to modify its Order. The facts presented herein demonstrate that the risk of harm to salmon and the harm suffered by farmers is not the same in all circumstances, and there are many opportunities for this Court to relieve, in part, the suffering of farmers without compromising the protection of salmon. Thus, this Court should modify its Order so that the

In fact, research regarding non-lethal effects of pesticide use rates are orders of magnitude higher than any rates ever detected in Washington State waters

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MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

EPA and the affected farmers can have a measure of certainty regarding compliance with the Order.

#### II. LEGAL STANDARD

## A. The Court Retains The Inherent Power To Modify The Terms Of The Injunctive Order Pending Appeal

Federal Rule of Civil Procedure 62(c) allows a District Court to stay an order of injunction during the pendency of an appeal. "When an appeal is taken from an interlocutory or final judgment granting, dissolving, or denying an injunction, the court in its discretion may suspend, modify, restore, or grant an injunction during the pendency of the appeal upon such terms as to bond or otherwise as it considers proper for the security of the rights of the adverse party." Fed.R.Civ.P. 62(c). The purpose of this rule is to codify "the inherent power of courts to make whatever order is deemed necessary to preserve the status quo and to ensure the effectiveness of the eventual judgment." <u>Tribal Village of Akutan v. Hodel</u>, 859 F.2d 662, 663 (9<sup>th</sup> Cir. 1988).

#### B. Standard For Evaluating Stays Of Injunctive Relief

The court considers motions for stays and injunctions pending appeal under a similar standard as the motion for preliminary injunction. Lopez v. Heeckler, 713 F.2d 1432, 1435 (9th Cir. 1983); see also Tanakee Springs v. Block, 778 F.2d 1402, 1407 (9th Cir. 1985); Nevada Airlines, Inc. v. Bond, 622 F.2d 1017, 1018 n. 3 (9th Cir. 1980). In deciding a motion for a stay or injunction pending appeal, the moving party must show either a combination of probable success on the merits and the possibility of irreparable injury, or that serious questions are raised and the balance of hardships tips sharply in the moving party's favor. Rodde v. Bonta, 357 F.3d 988, 994 (9th Cir. 2004). These standards are not treated as two distinct tests, but rather as a sliding scale representing "a continuum of equitable discretion whereby the greater the relative hardship to the moving party, the less probability of success must be shown." Regents of Univ. of Cal. v. ABC, Inc., 747 F.2d 511,

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515 (9th Cir. 1984). "The relative hardship to the parties" is the "critical element" in deciding "at which point along the continuum a stay is justified." Lopez, 713 F.2d at 1435.

#### III. **ARGUMENT**

#### The Terms Of The Current Injunctive Order Are Vague And A. Unenforceable Under The Standard Set Forth In Rule 65

Federal Rule of Civil Procedure 65(d) governs the content of injunctive orders and states: Every order granting an injunction . . . shall set forth the reasons for its issuance; shall be specific in terms; shall describe in reasonable detail, and not by reference to the complaint or other document, the act or acts sought to be restrained, and is binding only upon the parties to the action . . . and upon those persons in active concert or participation with them who receive actual notice of the order by personal service or otherwise.

Fed.R.Civ.P. 65(d). These provisions "are no mere technical requirements. The rule was designed to prevent uncertainty and confusion on the part of those faced with injunctive orders, and avoid the possible founding of a contempt citation on a decree too vague to be understood." Schmidt v. Lessard, 414 U.S. 473 (1974); see also Int'l Longshoremen's Ass'n v. Philadelphia Marine Trade Ass'n, 389 U.S. 64, 76 (1967) ("The judicial contempt power is a potent weapon. When it is founded on a decree too vague to be understood, it can be a deadly one. Congress responded to that danger by requiring that a federal court frame its orders so that those who must obey them will know what the court intends to require and what it means to forbid.").

Because the practical effect of the injunctive order restricts the actions of individual landowners who are not a party this litigation, the order violates rule 65

The Order enjoins the EPA's authorization of any chemical identified in Section 1 of the Order for use within the buffer zones. Dkt. No.224, Order, p. 4. However, the <u>effect</u> of the Order, is to prevent any individual from applying the chemical subject to this Order within the buffer zones. See Exhibit 1. The practical effect of this injunctive order, therefore, restricts the actions of individuals who were not parties to this lawsuit by placing

MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

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MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

the onus on the landowner or farmer to determine whether their actions fall within the scope of the injunction. In this respect, landowners, rather than the EPA, are responsible for implementing the terms of the injunction. This places a significant and impossible burden on the landowners<sup>2</sup>.

2. Even if the order can bind individual landowners, the terms of the order are unreasonably vague and fail to put the landowner on notice of acts prohibited by the order

The Ninth Circuit requires that "the language of injunctions . . . be reasonably clear so that ordinary persons will know precisely what action is proscribed." Portland Feminist Women's Health Center v. Advocates For Life, Inc., 859 F.2d 681, 685 (9thCir. 1988) quoting United States v. Holtzman, 762 F.2d 720,726 (9th Cir. 1985). This reflects a basic principle built into Rule 65, that "those against whom an injunction is issued should receive fair and precisely drawn notice of what the injunction actually prohibits." Granny Goose Foods, Inc., v. Brotherhood of Teamsters, 415 U.S. 423, 444 (1974). In deciding

Forcing individual landowners to interpret and comply with the terms of the Order may violate Rule 65(d) because the Order may only bind "the parties to the action, their officers, agents, servants, employees, and attorneys, and . . . those persons in active concert or participation with them who receive actual notice of the Order by personal service or otherwise." Fed.R.Civ.P. 65(d). "A court ordinarily does not have the power to issue an order against a person who is not a party and over whom it has not acquired in personam jurisdiction," 11A Charles Alan Wright et. al., Fed. Prac. & Proc. Civ.2d § 2956 (2002); see also Moreland v. Behl. Civ. No. 92-1238, 1995 WL 150579, p. 4 (N.D.Cal. Mar. 22, 1995) ("Equitable remedies may not be passed on to other alleged wrongdoers in the manner that damages can be passed on to joint tortfeasors or indemnitors by way of contribution or indemnification."); Alemite Mfg. Corp. v. Staff, 42 F.2d 832, 833 (2<sup>nd</sup> Cir. 1930)("[N]o court can make a decree which will bind any one but a party; a court of equity is as much limited as a court of law; it cannot lawfully enjoin the world at large, no matter how broadly it words its decree.").

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MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

whether an injunction violates Rule 65(d) for vagueness, "the fair notice requirement of Rule 65(d) must be applied in light of the circumstances surrounding [the injunction's] entry: the relief sought by the moving party, the evidence produced at the hearing for the injunction, and the mischief that the injunction sought to prevent." Federal Election Comm'n v. Furgatch, 869 F.2d 1256, 1263 (9th Cir. 1989) quoting United States v. Christie Industries, Inc., 465 F.2d 1000,1007 (3rd Cir. 1971).

#### Landowner determination of pesticide inclusion and ESU boundaries

Since the practical effect of the injunction requires the landowner to ensure that pesticides are not applied within the buffer zones, it is useful to summarize what the landowner must do to comply with the Court's Order. The general Order of injunctive relief prevents any ground application within 20 yards, and aerial application within 100 yards, of any "salmon supporting waters" within the range of the salmon evolutionary significant units ("ESUs") as identified by National Marine Fisheries Service ("NMFS")<sup>3</sup> in its critical habitat designation. Dkt. No. 224, Order, p. 4. The NMFS took a watershed approach to designating critical habitat by including habitat within the historical range for each listed species.4

Since the initiation of this litigation, the NMFS has changed its name to NOAA-Fisheries. For purposes of consistency, this brief will continue to refer to the agency as NMFS.

The critical habitat designations for salmonid species have since been revoked. See National Association of Home Builders et al. v. Evans, Case No. 1:00-CV-02799 (Consent Decree, D.D.C., April 30, 2002). Although in many cases, courts allow critical habitat designations to be enforced pending completion of new critical habitat (e.g. Natural Resources Defense Council v. U.S. DOI, 275 F.Supp. 2d 1136 (C.D. Cal. 2002), such stay of the vacature of critical habitat for salmon species has not been issued by the court.

MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

Critical Habitat for 19 Evolutionarily Significant United of Salmon and Steelhead in Washington, Oregon Idaho, and California, 65 F.R. 7764, 7764 (Feb. 16, 2000). For a given ESU, critical habitat encompasses all accessible reaches of all rivers in the watershed, and includes "all waterways, substrate, and adjacent riparian zones below longstanding, naturally impassable barriers." Id. Although the term "salmon supporting waters" is not part of a "critical habitat" designation under the Endangered Species Act ("ESA"), it is defined as the area below the ordinary high water mark of all streams, lakes, estuaries, and other water bodies where salmon are ordinarily found at some time of year." Dkt. No. 224, Order, p. 4. In Washington, the "salmon supporting waters" are identified by StreamNet, and include all streams contained on maps of 1:100,000 scale that may support salmon during one or more phases of its life cycle, based on species distribution data. See Exhibit 2.

To comply with the terms of the Order, the landowner must first determine if the chemical is subject to the terms of the Order. For those chemicals that the EPA has determined will either have "no effect" or are "not likely to adversely affect" ("NLAA") a listed species, the buffer zones do not apply and there are no restrictions on usage aside from those listed on the product label. Dkt. No. 224, Order, p. 4. These effects determinations are made for each ESU. Critical habitat is also geographically designated for each ESU, and

The StreamNet database is a cooperative venture of state and tribal fish and wildlife agencies in the Pacific Northwest and is administered by the Pacific States Marine Fisheries Commission. It is accessible at: http://www.streamnet.org. StreamNet has not been through the critical habitat analysis substantive or procedural requirements mandated by the ESA.

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these critical habitat boundaries for various ESUs may overlap.<sup>6</sup> Therefore, the landowner must first identify whether his property is located alongside any of the listed ESUs, and whether the active ingredient has received a "no effect" or NLAA determination for each listed salmon ESU,<sup>7</sup>

As of January 24, 2004, 13 active ingredients have received "no effect" determinations for all salmon ESUs and are therefore excluded from the injunctive Order. 

Id. Additionally, 19 pesticides have also received a "no effect" determination in at least one of the ESUs. Id., Exhibit 1. Thus, unless the intended use pesticide has received either a "no effect" or NLAA determination for *each* of the ESUs applicable to the farmer's land, the landowner may not apply a particular pesticide.

For example, chlorpyrifos is an insecticide that is very important for Washington's crops including: apples, cherries, pears, onions, grapes and sweet corn. Exhibit 3. If a farmer in the lower Columbia River wants to apply chlorpyrifos to his crops, the farmer must first determine how many ESUs encompasses his property. In this case, NMFS has identified three ESUs in the mid-Columbia River: steelhead, chinook salmon, and

Each listed species has the following number of ESUs at issue in this injunctive Order: Steelhead: 10 ESUs; Chinook Salmon: 9 ESUs; Coho Calmon: 3 ESUs; Chum Salmon: 2 ESUs; and Sockeye Salmon: 2 ESUs.

This information can be obtained through the National Oceanic and Atmospheric Administration (NOAA) at: http://www.nwr.noaa.gov/1salmon/salmesa/mapswitc.htm.

The 13 active ingredients not subject to this Order are: alachlor, atrazine, bentazon, dicamba, dichlobenil, iprodione, norflurazon, paraquat dichloride, pebulate, simazine, terbacil, thiodicarb, and triclopyr TEA.

MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

chum salmon. The EPA has made a "no effect" determination for the use of chlorpyrifos relative to chum salmon, and a NLAA determination for the use of chlorpyrifos relative to chinook salmon. However, the EPA has not yet made a determination for the use of chlorpyrifos relative to steelhead. The Order, therefore, currently precludes the landowner from applying chlorpyrifos to his orchards, within the ESU designated for the steelhead ESU. Thus, to determine whether the injunction applies, the grower must determine the geographic location of all ESUs, considering these boundaries may overlap. This is an extremely difficult task and great burden for most farmers.

### b. Landowner understanding of EPA's NLAA or "no effect" determinations

Adding to this confusion is the current method by which an individual must determine whether the EPA has given a "no effect" or NLAA determination for the proposed chemical in relation to each salmon ESU. The Order directs an individual to the charts attached as Exhibits 1 and 2. However, the format of the charts is very confusing, because the information is not comprehensive. Rather, the chemicals receiving a "no effect" determination are separated from those receiving a NLAA determination, requiring an individual to consult two lists for each applicable salmon ESU. Furthermore, each list is further broken down into listed salmon ESUs, and because the ESUs may overlap, an individual will likely be required to determine the pesticide's status with respect to several different ESUs. See Dkt. No. 224, Order, Exhibits 1-2. Again, this is a very heavy burden for farmers.

### c. Landowner determination of "Salmon Supporting Waters"

Once the landowner determines whether the proposed chemical use is subject to the terms of this Order by determining (1) whether his land is located within one or more

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ESUs, and (2) whether there has been either a "no effect" or NLAA determination made as to each ESU, the landowner must then determine whether the water body is considered "salmon supporting waters." The Order defines "salmon supporting waters" as "the area below the ordinary high water mark of all streams, lakes, estuaries, and other water bodies where salmon are ordinarily found at some time of the year." Dkt. No. 224, Order, p. 4. The Order identifies the StreamNet database as the source for identifying which particular waterbodies are capable of supporting salmon, and thus the buffer zone requirements.

The Order references StreamNet because relying solely on the NMFS' designations would prevent pesticide use on many waterways which are otherwise inaccessible to salmon. Because the Order attempts to prevent chemical use to areas where salmon are "ordinarily found," a landowner who determines his property falls within one of the ESUs must then access the StreamNet database to determine if the particular stretch is considered "salmon supporting waters." See Dkt. No. 217, pp.4-5. This presupposes that the landowner (1) has access to the Internet to access the NMFS and StreamNet databases, (2) is reasonably proficient in understanding how the NMFS' ESU designations work in relation to the StreamNet database of "salmon supporting waters," (3) can identify his land where the pesticides are intended for use with sufficient geographic accuracy (by using a global positioning sensor ("GPS") tool for instance) to find the corresponding description on both the NMFS and StreamNet databases, and (4) can interpret the databases in a manner that accurately complies with this Order.

This is because the NMFS designated many more streams as critical habitat than those streams actually used by the fish.

StreamNet does not provide a very user-friendly search engine. For example, landowners can only run a distribution query for each individual listed species in a given location. Additionally, although the Order states the injunction applies only to those streams identified by StreamNet as "salmon supporting streams," StreamNet itself describes the limitations of this approach. The StreamNet database covers only those streams contained on maps at the 1:100,000 scale. However salmon and steelhead may be present in many smaller waterbodies, yet those waterbodies are not defined by StreamNet as "salmon supporting waters." See Exhibit 2. Thus, StreamNet advises individuals attempting to use the database to further consult Washington State's Fish and Wildlife Department and further refine their inquiry using maps at the 1:24,000 scale. Id.

To show the difficulty that farmers would have in using the databases, two of

To show the difficulty that farmers would have in using the databases, two of the declarants have attempted to comprehend the Order and to navigate the StreamNet database, without success. Knutzen Decl. ¶ 15; Nelson Decl. ¶ 16. Neither declarant stated they had referenced the NMFS ESU listings prior to accessing the StreamNet database. This omission indicates that these declarants were unaware that the terms of the Order requires them to first consult the NMFS designations before overlaying the StreamNet database. Although the Order specially limits injunctive relief to those streams listed in StreamNet's database, the StreamNet user instructions specifically encourage individuals to further refine their search prior to applying chemicals subject to the Order. Thus, even if a landowner can understand how these two databases (the NMFS ESU geographical boundaries and StreamNet) interact and can navigate around the databases, the landowner is then advised to consult a third source, the Washington State Department of Fish and Wildlife. This final step

MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT is not contemplated by the terms of the Order, and its inclusion in the StreamNet database adds to the confusion.

The Order's reference to the "ordinary high water mark" is also confusing. Dkt. No. 224, Order, p. 4. The Order neither defines the "ordinary high water mark" nor provides any user-friendly reference for a landowner to determine where the "ordinary high water mark" lies. While the omission may appear minor, as shown in the attached declarations, a difference of a few feet is, in fact, substantial. See e.g. Hanson Decl. ¶ 11; Berdan Decl. ¶ 11; Peterson Decl. ¶ 6; Estes Decl. ¶ 2. In many cases, the difference a few feet makes to a marginal growing operation can affect overall profitability. Leaving such vague terms undefined by the Order, and failing to provide landowners with any sense of where the "ordinary high water mark" is in relation to their property, subjects the landowner to uncertainty and liability for failing to adhere the Order.

The Order further directs the EPA to notify a variety of persons who sell, distribute and use pesticides of the terms of this Order. To date, the EPA has made all of the relevant court Orders available on its website and has published a Federal Register notice informing the public about of the Order. See general the terms http://www.cpa.gov/oppfead1/endangere/wtc/index.html. The EPA is also in the process of developing a web-based system that will delineate the waters and pesticides addressed by the Order. See http://www.epa.gov/oppfead1/endanger/wtc/qs-as.htm. However, the EPA has not given any estimate as to when such a web-based system will be useable, and until such time, an individual is required to consult the Order, the NMFS website, the StreamNet database and the Washington State Department of Fish and Wildlife website in order to

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ensure compliance. Again, the current Order presupposes that the individual landowner has the Internet access, and can navigate around websites.

## 3. The Order impermissibly defines the scope of the injunction by reference to sources outside the document

"Rule 65(d) reflects Congress' concern with the dangers inherent in the threat of a contempt citation for violation of an order so vague that an enjoined party may unwittingly and unintentionally transcend its bounds,' and the requirement that the prohibited or mandated conduct not be described merely by reference to another document is designed to enhance the ability of affected persons to ascertain what acts are forbidden or required."

Goldic Electrical Inc. v. Loto Corp., Civ. No. 01-7103, 2001 WL 1511811 (2<sup>nd</sup> Cir. Nov. 27, 2001) quoting Sanders v. Air Line Pilots Ass'n Int'l, 473 F.2d 244, 247 (2<sup>nd</sup> Cir. 1972).

Currently, the terms of the Order require an individual to consult both the NMFS website to determine the boundaries of the salmon ESUs and the StreamNet database to determine whether the particular waterbody is "salmon supporting waters." References in the Order to these outside sources violates Rule 65. As previously stated, the StreamNet database also encourages individuals to consult the Washington State Department of Fish and Wildlife, an action neither contemplated nor mandated by the Order's current terms. Because terms such as "salmon ESU" and "salmon supporting waters" are not self-explanatory to those landowners bound by the Order in a practical sense, and require reference to sources outside the Order, the Order violates Rule 65.

## B. The Effect Of The Order Will Irreparably Harm Washington State Growers

#### 1. The importance of Washington State's agricultural industry

Agriculture accounts for 13% of Washington State's 223 billion dollar economy. Exhibit 4. For every one dollar of agricultural raw product, an additional four to

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six dollars are generated as the products move through processing and marketing channels to reach the consumer. <u>Id.</u> Washington State leads the nation's production in red raspberries (87.8%); hops (74.4%); spearmint oil (74.4%); wrinkled seed peas (65.6%); apples (60.2%); concord grapes (51.8%); sweet cherries (48%); pears (44.9%); lentils (41.9%); peppermint oil (35.2%); processing carrots (34.5%); tart cherries (32.8%); niagara grapes (32.4%); and processing sweet corn (29.2). <u>Id.</u> Washington State is second in the nation's production of asparagus (33.7%); dry edible peas (31.4%); fall potatoes (22.3%); processing green peas (21.6%); and apricots (5.4%). <u>Id.</u> Washington State ranks third for production of dry onions, wheat, prunes and plums, and fourth in the nation for production of barley, strawberries and peaches. <u>Id.</u>

In 2002, there were 39,000 farms in Washington State with an average size of 403 acres. Id. Small farm operations predominate, with 24,600 farms generating sales between \$1,000 and \$9,999 in 2002. Id. Average net farm income in 1997, including government payments, totaled only \$19,510. Id. However, a Washington State grower will also generate approximately \$138,001 in cash receipts, most of which is reinvested in local business to cover production and farm expenses. Id. Washington and Oregon growing operations also provided employment for a combined total of between 48,000 and 110,000 workers in 2003. Exhibit 5.

#### 2. Chemical use and integrated pest management methods

The Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA") recognizes the importance of chemicals to the continued production of food and fiber as well as for the prevention of disease. H.R. Rep. No. 939, 1998 U.S.C.C.A.N. 3474, 3475. Because all chemical use is the result of individual decision making, to understand the dimensions of any

chemical usage, one must recognize the economic reasons underlying the decision to use any chemical. Because chemicals are expensive, growers use chemicals only when it makes economic sense, i.e. there is a sufficient increase in crop yield, including crop quality, to justify the additional cost of the chemical. Andrew P. Morriss & Roger E. Meiners, Market Principles for Pesticides, 28 Wm. & Mary Envtl. L. & Pol'y Rev. 35, 40 (2003). Several of the declarants specifically noted that the high cost of the chemicals acts as a natural constraint or a limiting factor in the decision to use chemicals. Hanson Decl. \$\quantsizes\$ 5; L. Peterson Decl. \$\quantsizes\$ 5; C. Petersen Decl. \$\quantsizes\$ 5. Chemicals are also used as a form of insurance against risk in an industry which is generally characterized with low profit margins. E. Meiners, 28 Wm. & Mary Envtl. L. & Pol'y Rev. at 43. Risk avoidance comes in many forms. For example, chemicals are used to ensure that Mr. Hanson's cherry crop will meet the strict packinghouse and export standards. Hanson Decl. \$\quantsizes\$ 8. Because the majority of his cherry

David Pimental et al., Environmental and Economic Effects of Reducing Pesticide Use in Agriculture, 46 Agric., Ecosystem & Env't 273, 274 (1993) ("Dollar returns for the direct benefits to farmers have been estimated to range from \$3 to \$5 for every \$1 invested in the use of pesticides . . . .").

For example, a 2000 survey of Washington orchard pest management practices includes an appendix of the average cost per acre for each pesticide used. See Exhibit 6. Although the actual costs vary widely, on average, an orchard grower in Washington State spends between \$30-50/acre for chemical application.

See J.D. Mumford, A Study of Sugar Beet Growers' Pest Control Decisions, 97 Annals Applied Biology 243, 248 (1981) ("Insurance was the principle reason for using insecticides for 44 of the farmers interviewed [of 60]"); see also Craig D. Osteen, The Policy and Economic Issues of Pest Control and Energy Use, in Energy in Plant Nutrition and Pest Control 271-72 (Zane R. Helsel ed., 1987) (discussing impact of risk aversion on pesticide use).

MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

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trees fall within the buffer zone, foregoing the use of chemicals on his cherry crop increases Mr. Hanson's reliance on his apple crop to generate income. The decrease in crop variability increases personal risk in a market subject to fluctuating conditions. Hanson Decl. ¶ 11. For Mr. Jacobs, the use of chemicals to control weeds and pests in the buffer zone is critical to ensure that the remainder of the crop meets export standards. Jacobs Decl. ¶ 9. If weeds or pests infiltrate the crop, timothy hay generating \$1,000/acre on the export market will only generate between \$150-200/acre as low grade feeder material. Jacobs Decl. ¶ 9.

Finally, forgoing the use of chemicals also inherently involves trade offs. For example, if herbicides cannot be used to control weeds in the buffer zone, one alternative is to increase the amount of tillage. Jacobs Decl. ¶ 9. However, when the buffer zones are tilled, there is no root system to hold the soil in place. Tillage disturbs the soil, leading to increased sediment runoff. NMFS, An Ecosystem Approach to Salmonid Conservation, §1.5.3(Dec.1996)see <a href="http://www.nwr.noaa.gov/thabcon/habweb/habguide/ManTech/chap1.htm">http://www.nwr.noaa.gov/thabcon/habweb/habguide/ManTech/chap1.htm</a>. Increased sedimentation damages salmon spawning grounds. Certainly such unintended consequence was not envisioned by the Court's injunction.

Agricultural growers have made great strides in the past several years to reduce their use of chemicals with increasing reliance on alternative methods of pest management. Washington State growers in particular have embraced these alternative methods, as evidenced by a 2000 survey of orchard growers. Exhibit 6. The study found that the majority of growers are both significantly reducing chemical use white simultaneously engaging in greater use of alternative, environmentally-friendly pest management practices. Id., available at: <a href="http://opus.tfree.wsu.edu/~wjones/Survey2000/">http://opus.tfree.wsu.edu/~wjones/Survey2000/</a> Apple Report.html. For example, a recent Washington State study of alternative pest management methods in pear

Some of the declarants also report they are actively involved in exploring ways to reduce chemical impact on salmon. Miller Decl.¶ 12 (volunteered for a study of spray overdrift). Two of the declarants are members of local boards designed to improve salmon habitat. Eslinger Decl. ¶ 11 (member of county advisory board for salmon recovery); C. Petersen Decl. ¶ 11 (member of Entiat Watershed Planning Unit created to address issues of water quality and salmon recovery). Clearly these declarations show that Washington farmers are already working to maintain healthy salmon populations, thus they should not be with this injunction.

# 3. The chemical use restrictions within the buffer zones will take agricultural land out of production and destroy many family farmers

#### a. Orchard land must be taken out of production

Several of the chemicals subject to the injunctive Order are critical for use in orchard crops. For example, azinphos-methyl (Guthion) (hereinafter "AZM") is an insecticide used primarily as a foliar application against leaf feeding insects and is considered critical to orchard growers. Exhibit 3. This chemical is applied from the ground to approximately 70% of the apple trees in Washington State, primarily applied in late spring

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MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

and summer. 13 Id. AZM has been used for over 30 years, to help protect apple trees from codling moth (*Cydia pomonella*) infestation. Exhibit 10, p. 19. Without effective control, growers' losses can range from 50-90% of the crop. Id.

In June, 2002, the EPA voluntarily lowered the amount of allowable use of AZM per apple tree, citing unreasonable risks to wildlife as partial justification for its action.<sup>14</sup> Azinphos-Methyl, Revocation and Lowering of Certain Tolerances, 65 F.R. 38748, 38749 (June 22, 2002). As a result of these increased restrictions, less-dangerous substitute insecticides such as phosmet (Imidan) have become increasingly important to orchard growers. Phosmet (Imidan) is an insecticide applied to apple trees in September, used to control the coddling moth. Bryson Decl. ¶ 5. Chlorpyrifos (Lorsban, Dursban) is another important insecticide used on 68% of the apple trees in Washington State to control the great mealy bug population and is primarily applied during the spring. <sup>15</sup> Exhibit 3. While the pest is slow to spread from orchard to orchard, once established, the infestation is difficult to cradicate. Exhibit 10, p. 19. Malathion (Cythion) is an insecticide applied by air to cherry trees to control cherry fruit fly infestation. Berdan Decl. ¶ 5; Bryson Decl. ¶ 5. Carbaryl (Sevin) is an insecticide applied by ground between April and May for chemical thinning and pest control. C. Estes Decl. ¶ 5. As a pest control agent, Carbaryl is only used if malathion has not proved effective in controlling fruit fly populations. Bryson Decl. ¶ 5.

Azinphos-methyl is also used intensively on cherry (72%) and pear (46%) trees. Id.

The EPA also lowered the allowable use of azinphos-methyl on pear trees, cranberries and grapes. <u>Id</u>.

Chlorpyrifos is also important to Washington's cherry producers (used on 48% of trees) and pear producers (used on 33% of trees). Exhibit 3.

Cost-effective alternatives are not currently available for several of these

1 2 widely-used chemicals. For example, while there are alternatives available for both AZM 3 and carbaryl, these alternatives are more expensive and/or less effective. L. Peterson Decl. ¶ 4 8. Both methoxyfenozide (Intropid) and acetamiprid (Assail) are considered alternatives to 5 AZM yet are still largely untested locally and have produced inconsistent results. C. Petersen Decl. ¶ 8. Likewise, there is an experimental alternative to Cythion but it is not yet 6 7 commercially available, it is expected to be more expensive, and requires more frequent 8 applications. Berdan Deel, ¶ 8. These more expensive alternatives reduce the grower's net 9 profits, and less effective substitutes will often require more applications to achieve the same level of effectiveness. 16 L. Peterson Decl. ¶ 8. The use of these substitutes also increases the 10 11 grower's risk that the end product will not meet strict packinghouse or export standards. L. 12 Peterson Decl. § 10. There are myriad other unintended consequences of applying less 13 effective chemicals, including: additional man-hours required for extra applications, 14 additional fuel consumption, and increased wear and tear on farm machinery. L. Peterson

Decl. ¶ 8. To understand the nature of harm this Order imposes on orchard growers, one must only look to the nature of the crop grown. First, an orchard crop requires an enormous up front investment of both time and money to establish income-producing trees. See C. Estes Decl. ¶ 9. Second, leaving the trees untreated within the buffer zones would allow pests to colonize and disease to infest those trees while establishing a base from which to

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Organic growers spray "soft chemicals" five (5) times more often than conventional growers. Sandidge Decl. ¶ 8.

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MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

attack adjacent trees. L. Peterson Deel, ¶ 9. Because the trees within the buffer zones would effectively create a safe-haven for the orchard industry's most damaging pests and disease, all trees within the buffer zones would need to be immediately removed to insure the health of the remaining trees.

The irreparable harm is exemplified by Dennis Berdan's declaration. Mr. Berdan owns 32 acres of orchards in Chelan County, where he grows 11 acres of apples and 19 acres of cherries. Berdan Decl. ¶ 2. Cythion is applied acrially to cherry trees in June and July to prevent fruit fly infestation thereby subjecting Mr. Berdan to the 100 yard aerial (300 foot) buffer zone. Id. ¶ 6. As a further precaution, aerial spray applicators have established a 500 foot no spray zone around waterbodies to ensure proper compliance with the Court's Order. Id. ¶ 6; Bryson Decl. ¶ 11. What this means for Mr. Berdan is that his entire crop of cherries (19 acres) falls within a no-spray zone. Id. ¶ 11. Because Mr. Berdan cannot aerially spray Cythion and therefore cannot prevent infestations of the cherry fruit fly, Mr. Berdan will not be able to grow his cherry crop which produced a \$140,000 return on his investment last year. Id. Furthermore, as 60% of the land is devoted to cherry trees, and 80% of Mr. Berdan's yearly income is derived from farming, the effects of the injunctive Order will be catastrophic to his growing operations. Id. ¶ 2.

Several other declarants who grow orchard crops will also be severely and adversely affected by the imposition of the buffer zones. See Hanson Decl. ¶ 6 (of his 7 acres of cherry trees, 2 acres (approximately 30%) fall within the 20 yard buffer zone); L. Peterson Decl. ¶ 6 (of his 40 acres of apple and pear trees, 5 acres (20%) fall within the 20 yard buffer zone); J. Estes Decl. ¶ 2 (of her 21 acres of orchard trees, 2-3 acres (approximately 12%) fall within the 20 yard buffer zone); C. Petersen Decl. ¶ 6 (of his 68

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acres, 3.5 acres (approximately 5%) fall within the 20 yard buffer zone and 17 acres (25%) fall within the 100 yard buffer zone); Bryson Decl. ¶ 6 (because malathion must be applied by air to the 12 acres of orchard trees he owns, approximately 25% of his property falls within the 100 yard buffer zone); Miller Decl. ¶ 6 (of his 50 acres, 5 acres (10%) falls within the 20 yard buffer zone). Because removal of orchard trees within the buffer zone is the only way to ensure the quality of the remaining orchard crop, the orchard growers will suffer immediate and irreparable harm this coming year, even if all of these chemicals are subsequently given "no effect" or NLAA determinations.

Finally, the removal of all orchard trees within the buffer zones results in an immediate loss of both capital investment and future income. For example, the Order will force Mr. Sandidge to remove 11 acres of pear trees that were recently planted, constituting a loss of over \$3,700 in capital investment. Sandidge Decl. ¶ 11. Mr. Petersen states that the removal of orchard trees within the 20 yard buffer zone will result in the future loss of \$130,000 over the productive life of the trees. C. Petersen Decl. ¶ 9. Mr. Berdan notes that most of his cherry trees that will have to be removed to comply with this Order are eight years old and are just starting to bear a marketable crop. Berdan Decl. ¶ 9.

These losses are even more tremendous when one considers the value per acre these crops represent. While one acre of Washington State farmland is worth approximately \$1,290, the value per acre of orchard crops is significantly higher. Exhibit 4. For instance, sweet cherries are worth \$5,729 per acre, apples are worth \$6,249 per acre, and peaches are worth \$7,935 per acre. Id.

Some of the orchard growers have specifically attempted to establish alternative crops without success. For example, Mr. Sandidge has planted experimental crops of wheat,

corn and grapes on four vacant acres of his property throughout the past four years
Sandidge Dccl. ¶ 8. However, the local climate and soil conditions prevent these crops from
being grown in a cost-effective manner. Id.; see also Eslinger Decl. ¶ 8; Jacobs Decl. ¶ 8
Establishing alternative crops in some instances is also cost-prohibitive. Mr. Berdan states
that removing his orchard trees in order to plant a yearly crop like alfalfa hay would require
him to purchase specialized farm equipment, costing approximately \$50,000. Berdan Decl.
9. Therefore, the practical effect of this interim injunctive Order is to force orchard growers
to remove all trees within the buffer zones, losing both their initial capital investments as
well as all future productivity over the life of the trees. Alternative crops cannot be readily
established, and orchard growers face irretrievable loss as a result of this Order, even if every
chemical subsequently receives a "no effect" or NLAA determination.

MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

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#### b. Timothy Hay Farmers will be irreparably injured

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Kittitas County, Washington leads the state in the production of timothy hay, a crop which is primarily exported to Asian markets. Eslinger Decl. ¶ 9. Several of the chemicals subject to the injunctive Order are critical to economically produce timothy hay in a manner which meets export standards. For example, several different herbicides may be applied during the spring and fall to control the spread of grasses and broadleaf weeds. Among those herbicides commonly used are atrazine, dicamba, 2,4-D and trifluralin. Eslinger Decl. ¶ 4; Jacobs Decl. ¶ 4. With the exception of atrazine, these herbicides may be applied either by ground or by air. Eslinger Decl. ¶ 5.

The application methods, however, are not alternatives to be used interchangeably. Once growers begin to irrigate the crop land, ground application is no longer possible because the ground is too saturated to allow the grower to utilize the tractor and sprayer without compacting the soil and disturbing the emerging crop. Id. ¶ 6. Furthermore, once the crops reach a certain stage of maturity, ground application by tractor is impossible without physically damaging the growing crops. Jacobs Decl. ¶ 5. Therefore, while ground application may be possible in the early spring before irrigation begins and again in late fall after the crops are harvested, aerial application is required during the growing season to prevent crop damage.

The EPA has yet to make an effects determination on either 2,4-D or trifluralin, and accordingly, the 100-yard buffer zone applies. Exhibit 8. Furthermore, aerial applicators have increased the margin of safety to 500 feet to ensure compliance with the Order. With the imposition of the 100-yard buffer zone, Mr. Eslinger estimates that he will be unable to grow timothy hay on 166 acres out of 585 acres he currently farms (approximately 30%). In a prior assessment of Mr. Jacobs' land which assumed a 200-foot buffer zone, at least 50% fell within the buffer zone. Jacobs Decl. ¶ 6. Since substantially all of Mr. Jacobs' land will fall within the 300-foot injunctive Order or the 500-foot aerial applicator guidelines. Mr.

MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

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Jacobs will not be able to protect his growing crop against weed infestation in a manner to meet export standards. This will result in irreparable injury.

#### c. Farm land must be taken out of production

The Farm Bureau and Potato Commission present this Court with declarations from several family-run farm operations that show that the imposition of buffer zones will either cause substantial economic loss or, make continued farming operations uneconomical. Because of the strict packinghouse and export standards, farmers cannot leave crops within the buffer zones untreated to serve as a breeding ground for pests and weeds. Therefore, as a result of this Order, land within the buffer zones will be unproductive, laying fallow throughout the growing season. The loss of productive land results in the loss of income and reduces the overall profitability of the growing operation. However, the land within the buffer zones cannot be ignored. These areas must still be treated and maintained to prevent the spread of pests and weeds, further reducing overall profitability.

For example, Mr. Eslinger states that, when the rented farmland within the buffer zones are taken out of production, his fixed expenses will increase, while his income from harvested crops will decrease. Eslinger Decl. ¶ 7. His expenses will increase because in addition to the base rent which includes the now-fallow buffer zones, the land within the buffer zones must still be maintained to prevent the spread of weeds, insects, and rodents. Id. Additionally, for farmers who own the land, the Order effectively prevents them from renting out the buffer strips for any other agricultural use, reducing overall net profits. See Sandidge Decl. ¶ 9; J. Estes Decl. ¶ 9; Bryson Decl. ¶ 9; Miller Decl. ¶ 9.

## d. Foregoing the use of chemicals will both increase growers' overhead expenses and reduce the need for seasonal farm labor

As previously stated, because this injunctive Order irreparably harms orehard growers who will need to remove all orchard trees within the buffer zones, there will be a reduced need for seasonal or temporary farm labor. Mr. Bryson states that if he cannot treat

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his trees with AZM this year, he will need to lay off 25% of his employees. Bryson Decl. ¶ 11; see also Miller Decl. ¶ 11 (2 of 7 employees will be laid off); Berdan Decl. ¶ 11 (2 of 25 employees will be laid off). Alternative chemicals often requires more frequent applications. For example, an experimental alternative to Cythion which is applied by ground would increase labor costs fourfold. Sandidge Decl. ¶ 8. This alternative has also yet to be tested on a commercial scale. Berdan Decl. ¶ 8. Furthermore, maintaining the buffer strips requires additional man-hours to prevent the spread of pests from the non-productive land. Jacobs Decl. ¶ 9. Mowing the buffer zones to control weed growth also acts to disperse weed seeds to productive agricultural lands, and therefore mowing must be used in combination with other methods to effectively contain weeds and posts. Eslinger Decl. ¶ 10. Likewise, increasing tillage to combat weeds requires additional man-hours, Jacobs Decl. ¶ 9, substantially harming growers.

#### 4. Irreparably impacting the farmers will, in turn, irreparably affect farm-dependant communities

The ripple effects of this injunctive Order will fall most heavily on farmdependant communities. In addition to laying off seasonal employees, reducing the available acreage will harm fertilizer, seed and equipment dealers, and reduce the growers' need for agricultural subcontractors, such as chemical applicators. Morrison Decl. ¶ 13; Jacobs Decl. ¶ 9. The county-wide effects of this Order are exemplified by Chelan County, where orchard crops predominate along the main stem of the Entiat and Mad Rivers. <sup>17</sup> Exhibit 9, p. 3-18.

<sup>17</sup> Of the 33.8 miles of the mainstern Entiat River capable of supporting salmonid species. approximately 6.7 miles of the lower 11.4 miles have orchards adjacent to the river.

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23 24 Chelan County has been particularly hard hit over the last 20 years as several employers have closed local operations. <u>Id.</u>, p. 3-28. The watershed is also predominately public land, with 84.6% under federal ownership and only 8.8% in private hands. <u>Id.</u>, p. 3-16. One study conducted in 1994 determined that the agricultural/orchard community was the most stable and enduring industry in the watershed. <u>Id.</u>, p. 3-29. With only 8% of the watershed in private hands, and orchards stretching along large portions of the streambanks, the removal of orchard trees within the buffer zones will have a tremendous impact on the local economy, resulting in reduced tax revenue and lost jobs. <u>See also</u> C. Petersen Decl. ¶ 11; Sandidge Decl. ¶ 13.

This Order also undermines the efforts of local planning groups such as the Entiat Watershed Planning Unit. Established in 1993 as a joint effort between local residents, <sup>18</sup> the county conservation district and the U.S. Forest Service, the organization's goal is to bring citizens and local officials together in a voluntary manner to find ways of improving water quality and ensuring local actions do not harm listed species. <u>Id.</u>, p. 1-1. The Washington State legislature thereafter passed two bills in 1998, ESHB 2514 and 2496, which provided grant monies to local planning units to further their conservation efforts. <u>Id.</u>, p.1-2. This group has: (1) systematically assessed the current state of the watershed, (2) identified long-term strategies and goals, (3) proposed future site-specific projects best suited to improve both water quality and salmon habitat, and (4) identified further steps necessary to begin implementation of these proposed projects. <u>Id.</u>, p. 1-5.

One of the declarants, Mr. Sandidge, is a member of the Entiat Watershed Planning Unit. Sandidge Decl. ¶10.

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Significantly, one of the goals of this planning unit is that "through the continued use of good science, the mission and goals of the group will be met, and with landowner cooperation during implementation, regulating agencies may not find it necessary to apply 'One Size Fits All' regulations to achieve their management objectives for the Entiat WRIA." Id. This Court's blanket injunctive Order undermines years of work by groups such as the Entiat Watershed Planning Unit whose focus is to find the delicate balance between species protection and local needs.

### 5. The potential crop reductions will impact national availability and the nation's export market

Washington State leads the nation's production in several important crops, such as red raspberries, spearmint, apples, and cherries. Exhibit 4. Because this Order irreparably harms orchard growers, this Order has the potential to affect the short-term availability of both apples and cherries. Furthermore, for certain niche crops like red raspberries and spearmint, for which Washington State produces the vast majority of the nation's supply, this Order also has the potential to affect product availability. Although the precise effects are unknown, because these niche crops have a limited market, this naturally constrains the number of growers who produce them. It would take only a small number of these growing operations to be affected by the Order to impact overall availability of these niche products.

Furthermore, as previously explained, a grower cannot forgo aerial chemical applications within the buffer zones while still producing crops which meet export standards. For example, if a packinghouse finds even one cherry fruit fly magget in a crop, the packinghouse will deem the entire grower's crop unacceptable. Hanson Decl. ¶ 8; J. Estes

Decl. ¶ 8. Three instances of cherry fruit fly maggets will force the packinghouse to shut

down. Hanson Decl. ¶ 8. Growers of timothy hay compete on a global scale to provide hay l 2 to Asian markets. Eslinger Decl. ¶ 9. This is a very competitive market, and there are no 3 alternative chemicals commercially available to treat the hay while still meeting the export 4 standards. Eslinger Decl. ¶ 9. Foregoing the use of chemicals on crops planted within the 5 buffer zones is simply not an option. Furthermore, even if the buffer zones remain fallow, 6 the land still must be treated to control the spread of weeds and pests into productive acreage. 7 Jacobs Deel. ¶ 9. This Order, therefore, substantially increases the risk to growers that their 8 crops will not meet export or packinghouse standards because their use of chemicals to 9 protect their maturing crops have been limited by the Order. 10 11 12

Farmers often rent crop land adjacent to waterways; if farming is uneconomical, the land may be subject to future subdivision.

Washington State's growth management laws, acting in conjunction with this Order, give landowners limited opportunities to develop their land. Designed to promote orderly development, the growth management laws place several restrictions on a landowner's ability to subdivide his land for future development. Growers are frustrated because they are being forced to expend time and money on fallow buffer zones which undercut profit margins while simultaneously being prevented from selling off the nonproductive land for other uses. See Berdan Decl. ¶ 13; J. Estes Decl. ¶ 9

Where growers are able to subdivide agricultural land, development leads to loss of habitat and increased disturbances along waterways. Development also increases the amount of impervious surface material which produces increased runoff. Felsot Decl. ¶ 10. Marginal growers in rapidly developing areas who are irreparably harmed by this Order will look to subdivision as a way to recoup their investments if farming becomes uneconomical.

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For example, the Entiat river valley is experiencing a surge in subdivision development due to an increase in urban residence and/or vacation home construction. In the final draft report of the Entiat watershed management plan, high-density development on land adjacent to or near the river was determined to be a potential threat to the existing water quality. Exhibit 9, p. ES-4. This is, in fact, happening in the Entiat valley as growers take advantage of favorable economic conditions and sell off their land for development. See Eslinger Decl. ¶ 7.

## 7. Chemical use allows farmers to produce crops more economically; farmers invest these savings in projects that enhance salmon habitat

Most of the declarants continue to invest substantial sums of money on improvements designed to reduce water usage, improve water quality, and enhance salmon habitat. The effect of this Order is to render previous improvement projects within the buffer zones worthless. Furthermore, these effects irreparably harm orchard growers, since all of the trees within the buffer zone will need to be removed and will constitute an irreparable loss of future income. For example, Mr. Hanson spent \$3,000 on improved drainage and crosion controls within the buffer zone and will have no way to recoup his investment once the cherry trees within the buffer zone are removed. Hanson Decl. ¶ 10; see also L. Peterson Decl. ¶ 11 (between \$5,000-10,000 lost investment in permanent fed irrigation system); C. Petersen Decl. ¶ 10 (lost investment for wind machines and improved sprinkler systems); Bryson Decl. ¶ 12 (lost investment for windmills and drip irrigation systems).

This Order will also result in growers foregoing future improvement projects. For instance, Mr. Sandidge states that he will not likely go forward with plans for improving the water delivery systems within the buffer zone. Sandidge Decl. ¶ 10. Likewise, Ms. Estes

MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

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This Order also impacts a grower's ability to voluntarily undertake salmon-habitat enhancement efforts. Because these projects are often performed at the grower's own expense, reducing overall profits through the imposition of buffer zones will eliminate the source of funding for future enhancement projects. The type of habitat enhancement projects varies, from simple solutions such as maintaining brush and planting trees along the waterways which provide shade and protective cover to more ambitious projects such as armoring the banks with riprap, building rock weirs, regrading streambanks and physically altering river channels. See Berdan Decl. ¶ 12; L. Peterson Decl. ¶ 11; C. Petersen Decl. ¶ 11; Millier Decl. ¶ 12; Eslinger Decl. ¶ 11; Jacobs Decl. ¶ 10.

## 8. Reducing the amount of land available for farming may result in the loss of vested water rights

One declarant, Mr. Berdan, expresses concern that this Order may result in the loss of his vested water rights. Berdan Decl. ¶ 9. Most of Washington State's water rights are based on the 1917 Water Code, which centralized the administration of water rights based on concepts such as beneficial use, non-interference with prior vested rights, and the public interest. See Hallauer v. Spectrum Properties, Inc., 18 P.3d 540, 543 (Wash. 2001); RCW § 90.03.040. However, as with all water rights systems subject to the prior appropriation doctrine, these rights may be lost over time due to non-use. In Washington, the state may "reclaim" water rights after five years of non-use. RCW § 90.14.130. This Order contemplates that it may take the EPA several years to complete its section 7 consultation obligations with the NMFS. Dkt. No. 224, Order, p. 12 (list of terminating events). For

MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT Mentor Law Group, PLLC 1100 Market Place Tower 2025 First Avenue Seattle, Washington 98121 TEL 206.493.2300 FAX 206.493.2310

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MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

growers who own a substantial portion of land within the buffer zones, the effect of this Order will reduce the amount of arable acreage, in turn, reducing the amount of water diverted to the crops. If the injunctive Order remains in effect for more than five years, these growers are at risk of losing their vested water rights. 19

#### C. The Plaintiffs Have Not Demonstrated Jeopardy To Salmonid Species

Certainly, the misapplication of chemicals can impact salmon habitat. At the same time however, a variety of other factors also impact salmon and salmon habitat, including climate, fire, water impoundment and diversion, and various human activities such as timber harvesting, mining, and grazing. As explained by the Federal Caucus:<sup>20</sup>

The deterioration of the Columbia's once-numerous fish runs can be traced to the economic development of the basin. Forestry, agriculture, mining and urbanization have altered or destroyed tributary habitat. Fishing, or harvest, has reduced the number of adult fish that return to spawn. Some hatcheries have introduced inbreeding and competition, may

Although the statutes include a provision which defines "sufficient cause" for non-use, one of which is the operation of legal proceedings, this can only be raised as an affirmative defense, meaning the landowner is still subject to the initial relinquishment determination and must defend himself by appealing the determination to the pollution control hearings board. See RCW §§ 90.14.130, 90.14.140.

The Federal Caucus is the name given to the nine Federal agencies that have natural resource responsibilities within the Columbia River Basin under the ESA, NMFS, U.S. Fish and Wildlife Service, Bonneville Power Administration, U.S. Army Corps of Engineers, U.S. Bureau of Reclamation, Environmental Protection Agency, U.S. Forest Service, Bureau of Land Management, and Bureau of Indian Affairs. The report is also referred to as the "All-H Paper." The document may be accessed at: http://www.salmonrecovery.gov/strategy.shtml.

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have been a source of disease for wild fish, and have in some cases induced fisheries to harvest at rates too high for natural stocks. And hydro power dams on the Columbia and Snake rivers have blocked and inundated mainstream habitat, altered natural flows, impeded passage of migrating fish, and created a series of pools where fish predators reside. . . . Natural factors, such as ocean conditions and natural predation also influence survival of the salmon. Federal Caucus, Conservation of Columbia Basin Fish, Final Basinwide Salmon Recovery Strategy, (December, 2000).

In this case, Plaintiffs have sought to enjoin all use of 54 active ingredients within the buffer zones established by the Order where listed salmonid species are historically found within the states of Washington, Oregon, and California. Dkt. No. 224, Order, p. 4. With one broad brush stroke, Plaintiffs have essentially characterized the use of any chemicals subject to the Order as harmful to salmon, regardless of the landscape's unique physical characteristics. It is at best simplistic to assume that the impacts of chemical use are always "bad," as Plaintiffs wish this Court to assume, or that the impacts of chemical use are the same in all locations and under all conditions.

1. Plaintiffs have failed to show that the section 7 procedural violation implicates the EPA's underlying obligation to avoid jeopardizing salmonid species through its registration process

Section 7 of the ESA contains both procedural and substantive requirements to which federal agencies must adhere. For example, an agency may fail to initiate consultation for activities which may affect listed species, warranting an injunction of the activity. See Pacific Rivers Council v. Thomas, 30 F.3d 1050, 1056-57 (9<sup>th</sup> Cir. 1994) (enjoining Forest Service management activities until consultation is initiated); Sierra Club v. Marsh, 816 F.2d 1376, 1389 (9<sup>th</sup> Cir. 1987) (enjoining construction of a flood control project "with the

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MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

injunction continuing until such time as consultation is reinitiated."); Thomas v, Peterson, 753 F.2d 754, 765 (9th Cir. 1985) (enjoining the Forest Service from constructing a road prior to initiating consultation regarding the road's impact to wolves). Importantly, such injunction only applies until such time as consultation is initiated. Id. Once consultation is initiated, the ESA section 7(a) procedural violation is cured, and the only prohibition against the action proceeding is a violation of section 7(d). Sierra Club v. Marsh, 816 F.2d at 1389.

Injunctive relief may also be granted for substantive violations of the ESA. Specifically, an agency may conduct an activity that is deemed to jeopardize the continued existence of a listed species. However, this type of injunction is unusual because "jeopardy" is a legal term of art which cannot occur until NMFS or the Court deems it to occur, usually upon issuance of a Biological Opinion ("BO"), the requirements of which agencies rarely ignore. See Sierta Club v. Marsh, 816 F.2d 1376 (9th Cir. 1987) (enjoining construction of part of a flood control project until the Corps of Engineers complied with the mitigation measures stipulated by the FWS's BO, which concluded that the project would jeopardize the continued existence of a listed species); Greenpeace v. National Marine Fisheries Service, 106 F.Supp.2d 1066 (W.D. Wash. 2000) (enjoining pollock fishing which, according to a NMFS BO, was likely to jeopardize a listed species).

The <u>Greenpeace</u> opinion cited above stands for the proposition that an injunction under section 7 is an appropriate remedy for a substantial procedural violation which implicates the agency's underlying substantive obligation to ensure its actions do not "jeopardize" a listed species. 106 F.Supp.2d at 1073. In that case, the court enjoined ongoing pollock fishing because the record, including a BO issued by the NMFS, had determined that pollock fishing would jeopardize the endangered stellar sea ion. <u>Id.</u> at 1077. The court notes: "the ESA does not require that the government halt all activities [during consultation], unless intermediate activities violate [section] 7(a)(2)," but "permits non-jeopardizing activities, so long as the [s]ection 7(d) mandate is not violated." <u>Id.</u> at 1075, n.

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MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

5, quoting North Slope Borough v. Andrus, 486 F.Supp. 332, 357 (D.D.C. 1980) (emphasis added). Again, agency action may continue once consultation is initiated, provided it does not jeopardize the species or violate the provisions of section 7(d).

The holding in Bays Legal Fund v. Browner, 828 F.Supp. 102 (D. Mass. 1993), holding in Greenpeace. In Bays, the EPA approved construction of an outfall tunnel for the purpose of conveying treated sewage nine miles out into Massachusetts Bay. The EPA had sought the concurrence of NMFS after producing an ESA section 7 Biological Assessment ("BA") which surmised the discharge of nutrients from the outfall pipe would not likely have any adverse impacts on listed species. However, after consultation was initiated, but before NMFS issued a BO pursuant to section 7(b), the EPA awarded contracts to begin construction on the outfall tunnel. Environmental groups sued the EPA seeking to enjoin construction, arguing that the EPA's NLAA determination did not properly take into account how increased levels of nutrients from the outfall tunnel would impact listed species. The plaintiffs offered affidavits from several experts who surmised that increased nitrogen could fertilize harmful phytoplankton species, which, in turn, could impact the food supply of the endangered right whale. Id. at 109. The court refused to issue an injunction, holding that there was "no evidence that the construction or operation of the outfall tunnel is likely to jeopardize the continued existence of the endangered species in the bays." Id. at 110. The court noted:

Note that the Court analogized the plaintiffs' burden to prove irreparable harm to the species under a request for preliminary injunction with the plaintiffs' burden to prove a likely adverse impact under a claim for violation of section 7(a)(2). Id. at 108, n. 13.

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23 24 [i]f and when there is concrete, scientific evidence that substantiates the likelihood of a threat, it will be appropriate to reconsider the wisdom, not to mention the legality, of the outfall tunnel as a means of effluent discharge. Until then, however, the ESA does not require the cessation of activities because of "concerns" that some may have. Such a grave response is only required by statute when there is a likelihood" of an adverse impact to endangered species. Nothing in the experts' affidavits comes near to meeting that standard. Id. at 109.

Greenpeace and Bays stand for the same proposition: that agency action which is the subject of consultation may be enjoined during consultation if such action jeopardizes the continued existence of a species in violation of section 7(a). In Greenpeace, fishing activity jeopardized the continued existence of sea lions, and was enjoined. In Bays, construction and operation of a sewage line did not jeopardize any listed species, and was not enjoined. Unlike Greenpeace, where the plaintiffs were able to demonstrate likely jeopardy by reference to an existing biological opinion, none of the evidence presented by the Plaintiffs in this case demonstrate likely jeopardy to salmonid species. Similar to the Bays case, where the court refused to issue an injunction based on speculative evidence offered by plaintiffs, the Plaintiffs in this case are also unable to come forward with credible evidence which implicates the agency's substantive obligations under the ESA.

## The EPA's generic risk assessment model does not apply to the conditions in Washington State's agricultural regions

The Order presupposes that the section 7 procedural violation presumes harm to the salmonid species. For purposes of the ESA, the particular salmon ESU is the "species." 65 Fed.Reg. 7764, 7764. This accords with the notion that the integrity of the salmonid population is tied to the properties of the population as a whole; with the status of the reproductive rate serving as the defining characteristic of population health. Felsot Decl. ¶ 13. The ESA requires the various agencies to ensure their actions do not "jeopardize" the species. 15 U.S.C. § 1536(a)(2). Each salmon ESU is comprised of several, discrete

salmonid populations. Therefore, the Order presupposes that the failure to consult under section 7 "presumes jeopardy" to an entire salmon ESU, comprised of several thousand individual fish. "EPA's own reports document the potentially-significant risks posed by registered chemicals to threatened and endangered salmonids and their habitat." Dkt No. 73, Order (July 2,2002), p. 15, fn. 25. However, because the EPA's generic risk assessment model is not applicable to on-the-ground conditions in Washington State, the evidence on which Plaintiffs' rely to demonstrate harm, does not, in fact, indicate harm at a level that would jeopardize a salmon ESU. Simply put, the EPA's generic risk assessment model does not accurately assess the risk of routine chemical applications by agricultural growers in Washington State to the "species" as defined by the reproductive health of the entire population.

The EPA currently engages in a four-step risk assessment process. The first step entails identifying the potential hazards for aquatic organisms, including (1) death, or (2) developmental and reproductive effects. Felsot Decl. ¶ 14. The second step requires the EPA to conduct dose-response assessments. These assessments come in two forms, depending on the nature of the hazard. The LC50 value represents acute toxicity, and the concentration of chemicals causing a 50% mortality rate in a test population. Felsot Decl. ¶ 15. To obtain this value, the EPA reviews the available scientific literature and selects the most sensitive species, the one with the lowest LC50 value. Id. The representative species is exposed to constant but varying rates of chemical concentrations over a period of 48-96 hours. Id. To determine the developmental and reproductive effects, the EPA utilizes lifecycle tests to assess the potential for chronic toxicity. Id. ¶ 16. In conducting these lifecycle tests, the EPA selects a concentration of chemicals representing a harm threshold that produces no observable adverse effects ("NOAEC") on the most sensitive species to assess

MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

the potential risk. <u>Id.</u> Selecting the most sensitive species ensures a margin of protection remains for all other species. <u>Id.</u> ¶ 17.

The third step focuses on what amount of exposure is expected to cause harm to the representative species. Here is where the EPA's risk assessment model is absolutely not representative of any actual conditions in the Pacific Northwest. To estimate exposure, the EPA uses a computer simulation model that assumes a chemical is being applied to a ~25 acre (10 hectare) field that surrounds a  $\sim$ 2.5 acre (1 hectare) pond that is  $\sim$ 6 feet (2 meters) deep. <u>Id.</u> ¶ 18. Furthermore, this model assumes the chemicals are being applied at both the maximum permissible rate and at the maximum permissible frequency of use. Id. The EPA assumes the pond is static, with chemicals primarily being transported into the water via surface runoff. Id. In order to account for spray drift, the EPA further assumes that 1% of the total ground applications and 5% of the total aerial applications will be transported into the pond. In the initial coarse-scale screening approach, the EPA estimates Id. concentrations by assuming no spray drift and a 6-inch rainfall in 24 hours. Id. In its finescale approach, the EPA uses a model that is characteristic of meteorological conditions and soil properties of selected sites in the nation. Id. Note that both models assume the pond is stagnant. What this means is that the models do not account for chemical dissipation through transport and dilution; rather, chemicals are assumed to degrade only through exposure to sunlight. Id. By assuming chemicals are applied to a static waterbody, and further assuming that only exposure to sunlight will degrade the active ingredients, the EPA's current model builds in an enormous cushion of safety for even the most sensitive of species in the harshest of conditions. As will be shown below, this model simply does not comport to the on-theground conditions in Washington State.

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The fourth step is to characterize the level of risk. This is expressed as a ratio of the estimated exposure (concentration) to the harm threshold established for the most sensitive species (either the LC50 or concentration of chemicals causing no observable effects in chronic toxicity assessments). Id. ¶ 19. This level of risk is expressed narratively via various numerical categories that represent levels of concern ("LOC"). Id. The EPA concludes that the risk of harm to a generic listed aquatic species exceeds the LOC when the risk quotient ("RQ") for acute toxicity is 0.05 or greater. Id. In other words, the EPA has built in another safety factor of 20 (1/0.05 = 20) to the LC50 of the most sensitive aquatic species to assign a risk value. Id. Once the LOC has been triggered, the EPA conducts further assessments which take into account the geographic location of the salmon ESU and the cropping patterns in the region. If the EPA determines there is a substantial overlap between the farmland and the ESU, the EPA will issue a "may likely harm" finding for that ESU. Id. ¶ 20.

AZM, the active ingredient in Guthion critical to orchard crops will illustrate how the EPA's model is inapplicable to local conditions, producing findings that vastly overestimate the potential risk to salmonid species. The EPA has issued a "may likely affect" finding for the use of AZM for 25 of 26 salmon ESUs; some of these ESUs are located east of the Cascades. Id. ¶ 22. While the basis for the finding assumed that the bulk of AZM would enter a static pond via surface runoff, the finding does not take the climate east of the Cascades into proper account. Id. ¶ 23. From March through August, when AZM is normally applied to orchard trees, there is generally too little rainfall to cause surface runoff. Id. Furthermore, with the improved water-delivery systems, modern irrigation methods do not create large return flows capable of transporting the active ingredients into

the water. In Washington State, nearly 85% of all irrigation is by sprinkler or drip/trickle systems, rather than by gravity flow. Id. Similarly, west of the Cascades in the summer months, there is comparatively low rainfall. As a result, irrigation systems also predominate after May in the western counties. Id. The EPA has therefore estimated exposure that is largely influenced by surface runoff, yet runoff is an unlikely transport mechanism east of the Cascades and during the summer months west of the Cascades.

The other source of chemical transport into the waterways built into the EPA's

The other source of chemical transport into the waterways built into the EPA's model is spray drift. Since the timing of much chemical applications coincides with the dry months east of the Cascades, implicit in the Court's Order is that applicator practices are resulting in chemical entry into waterways via spray drift. Again, EPA's model assumes that the volume of receiving waterways are static. Id. ¶ 24. Furthermore, the EPA's model does not factor into its harm finding that the waterways are flowing, diluting and dissipating the active ingredients. Id. ¶ 25.

Again using AZM as an example, the EPA's model predicted peak AZM concentrations of 13 parts per billion ("ppb"), with a subsequent reduction to 9 ppb after 60 days. Id. ¶ 25. According to the model, it would take four months to reduce the concentration of AZM by 50%. Id. However, actual evidence obtained from water quality sampling belie this prediction. First, the US Geological Survey ("USGS") water quality results, upon which Plaintiffs' rely, found a maximum AZM residue of only 1 ppb in one single sample taken. Id. Second, in studies of Louisiana waterways during the early 1990's, heavy rainfall and subsequent runoff have been associated with AZM residues of tens of ppb. However, AZM concentrations were reduced to 1-2 ppb within a few days after the initial runoff, even in the slow moving waters characteristic of Louisiana canals. Id. What this

indicates, is that EPA's model based on assumptions of static ponds and non-flowing water, vastly overestimates the risk of exposure, whether due to spray drift or runoff under real-world conditions. This conclusion is borne out by Plaintiffs' own evidence, indicating that the EPA's risk assessment model grossly exaggerates the potential for AZM exposure when chemicals are used in conformance with the label under real-world conditions. Pertinently, the EPA itself has recognized the limitations of this model, stating:

The applicability of the overall EEC scenario, i.e., the 10 hectare watershed draining into a one hectare farm pond, may not be appropriate for a number of T&E species living in rivers or lakes. This scenario is intended to provide a "worst-case" assessment of EECs, but very many T&E fish do not live in ponds, and very many T&E fish do not have all of the habitat surrounding their environment treated with a chemical. . . . [L]arger streams and lakes will very likely have lower, often considerably lower, concentrations of chemicals due to more dilution by the receiving waters. In addition, where persistence is a factor, streams will tend to carry chemicals away from where they enter into the streams, and the models do not allow for this. . . . We can simply qualitatively note that the farm pond model is expected to overestimate EECs in larger bodies of water. W. Erickson & L. Turner, EPA, Azinphos-methyl Analysis of Risks to Endangered and Threatened Salmon and Steelhead (July 23, 2003).

To summarize, the EPA has built an enormous margin of safety into its effects determinations. The EPA selects the most sensitive aquatic species to estimate exposure to chemicals. When characterizing the level of risk for generic endangered species, the EPA builds in an additional safety factor of 20 into its "levels of concern." The risk characterization assumes chemicals are being applied to a field surrounding a static pond

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with interchangeable volume. Such a scenario fails to recognize rapid dissipation of resides as occurs under natural conditions, especially in flowing waters. The farm pond model used to estimate chemical exposure is simply not applicable to conditions in the Pacific Northwest. While the generic model may be appropriate in several applications, the regional climate and landscape actively negate the assumptions underlying the EPA's model. The EPA recognizes the inherent limitations of the model, stating the farm pond model generally overestimates the risk threshold in all except headwater areas. While the model assumes most chemicals enter the waterways through surface runoff, this is not the primary mode of transport in much of Washington State since the growing season generally coincides with the drier months. Furthermore, the model does not account for transport and dilution. The model also does not account for volatilization, a process whereby the water naturally degrades the active ingredients. In balancing claims of irreparable harm, from a theoretical standpoint, Plaintiffs have simply failed to demonstrate that the EPA's risk assessment process in designating "levels of concern" suggests that the use of chemicals jeopardizes salmon on a species level. In claiming irreparable harm to the fish simply by invoking theoretical calculations, the Plaintiffs have failed to demonstrate jeopardy to salmon on a species level as a result of misunderstanding the severe limitations of the EPA's risk assessment model for the Pacific Northwest.

# 3. The Plaintiffs' evidence does not show that current agricultural practices harm salmon

Stated simply, the Plaintiffs have not come forward with any evidence that indicates that agricultural growers, when using chemicals in conformance with the product labeling requirements, have harmed salmonid species. The general absence of fish kill incidents in the Pacific Northwest and the low detection frequency and concentrations of

MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

chemical residues found in local waterways suggest that current agricultural practices coupled with an overall reduction in chemical use have adequately protected salmon. If current agricultural practices have not been shown to harm salmon populations, the injunctive Order imposing buffer zones does not serve to remedy the alleged harm.

The Plaintiffs rely on USGS water quality surveys as evidence that chemical residues harm salmon. Plaintiffs reliance on these studies are misplaced; these studies actually support the Farm Burcau's and Potato Commission's contention that agricultural practices, particularly east of the Cascades, pose little threat to salmon. To demonstrate, two of the most allegedly potentially harmful chemicals are those containing chlorpyrifos and AZM. Id. ¶ 29. These active ingredients are used extensively in orchard crops east of the Cascades. In a water quality study of the Columbia Basin Plateau, the USGS detected chlorpyrifos in only 9% of the samples taken, and azinphos-methyl in only 12% of the samples taken. Id. Furthermore, where detected, almost every sample had concentrations of less than 0.1 ppb. Id. Compare these numbers with those developed by the EPA in their chronic toxicity assessments, remembering that these assessments are based on harm to the most sensitive aquatic species. The EPA determined there was no observable adverse effects in the most sensitive aquatic species so long as the concentration of AZM did not exceed 0.44 ppb and the concentration of chlorpyrifos did not exceed 0.57 ppb. Id. East of the Cascades, in an area where there is little rainfall during the growing season and where these active ingredients are intensively used, the actual data obtained by the USGS demonstrate that the concentrations of these two active ingredients are 4-5 times lower than the levels the EPA considers potentially harmful. Id.

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Likewise, west of the Cascades, where the additional rainfall allows chemicals to be transported into the waterway by both surface runoff and spray drift, the USGS found detectible levels of chlorpyrifos in only 10% of the samples taken from waters in the Puget Sound Basin and 14% of the samples taken from the Willamette Basin. Id. ¶ 30. There were no detectible levels of AZM in either watershed. Where chlorpyrifos was detected, the concentrations were all less than 0.009 ppb, 60 times less than the hazard threshold set by the EPA. Id.

Furthermore, the USGS studies of the Columbia Basin Plateau and the Willamette Basin were conducted between 1992-1996. In the last ten years, however, the agricultural industry has undergone many dramatic changes. For example, AZM was applied on 17% less acres in 2000 than in 1991 and almost 30% total less pounds were used. Id. ¶ 31. Similarly, the rate of use of chlorpyrifos per crop year has dropped at least 10% between 1991 and 2001. Id. ¶ 32. Furthermore, as previously noted, the majority of Washington State growers have switched over to more efficient water delivery systems in the past decade, resulting in less water diversion and less surface runoff. Id. ¶ 23. Given that actual water quality samples taken ten years ago show concentrations of active ingredients far below the harm threshold standard developed by the EPA, and further considering that agricultural growers have adopted use reductions for many of these chemicals in the past ten years, there is simply no basis for concluding that current agricultural practices are jeopardizing populations of salmonid species to an extent implicated by the Plaintiffs.

Good agricultural practices are supplemented by adhering to the restrictions contained on the product's label. The declarants all carefully apply these chemicals according to the product's label. Bryson Decl. ¶ 5; C. Estes Decl. ¶ 5; Berdan Decl. ¶ 5;

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Eslinger Decl. ¶ 5; Hanson Decl. ¶ 5; L. Peterson Decl. 5; C. Petersen Decl. ¶ 5; Sandidge Decl. ¶ 5; Miller Decl. ¶ 5; Jacobs Decl. ¶ 5. For many of these chemicals, particularly the organophosphate ("OP") insecticides, the labels already prevent application within a product-specific no-spray buffer zone. For example, the changes to the AZM product label will require a 25-foot buffer zone for ground applications and a 150-foot buffer zone for aerial applications. Felsot Decl. ¶ 38. Other chemical labels mandate the method by which growers apply the chemicals. For example, new labels require applicators to direct the spray from the nozzle only into the orchard when applying the chemical to the outer two rows in order to reduce spray drift. Id. ¶40. Incorporating additional restrictions into the product's label to manage future use is yet another way in which agricultural growers indirectly improve salmon habitat while allowing for gradual changes in agricultural practices which are not overly burdensome for growers to implement.

Given the extensive use of OP insecticides in the Pacific Northwest, if these active ingredients were present in the waterways at levels which would pose jeopardy to salmon under the EPA's harm threshold, one would expect to find evidence of past fish kills. In conjunction with the reregistration process, the EPA publishes all known instances of fish kills attributable to that active ingredient. Id. ¶ 35. The EPA data related to the use of either AZM or chlorpyrifos, two of the most allegedly toxic OP chemicals, shows no fish kill incidents related to these two products in the Pacific Northwest. Id. In other areas of the United States where fish kills were attributable to these two chemicals, the events occurred only after storms caused high levels of surface runoff. Id. As previously explained, because the application of chemicals in the Northwest coincides with the dry months, it is extremely unlikely that any fish kills would result from surface runoff. In a risk assessment of

MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

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chlorpyrifos, assuming a residue concentration in the water that is one-tenth of its LC50, the EPA determined that only one individual salmonid in 30,000,000 would die at these concentrations. <u>Id.</u> ¶ 36. The absence of fish kills support the contention that chemicals, when applied under local conditions and in conformance with the label requirements, simply do not enter the local waterways in levels which would jeopardize the continued existence of the salmonid species.

Finally, despite the fact that for the past 50 years agricultural growers in the Pacific Northwest have used chemicals which were considered highly toxic to fish, salmon have returned to the rivers in record numbers in the past few years. <u>Id.</u> ¶ 37. Thirty to fifty years ago, growers were using chemicals that were highly persistent and bioaccumulated to high levels in the fish tissue. <u>Id.</u> Although the use of these most toxic insecticides has been curtailed in the past thirty years, some of these same products are still used today. <u>Id.</u> Considering that these same chemicals are still in use today, yet record numbers of salmon have been returning to Northwest rivers, a strong argument exists that salmon are not in imminent danger from continued chemical use.

### D. Additional Suggestions To Modify The Scope Of The Injunction

1. Delay the operative date of the injunction until the EPA develops a user-friendly, web-based system which enables a landowner to determine whether the proposed application falls within the scope of the injunction

As thoroughly explained in section III.A. of this Motion, the current terms of Order are overly vague and replete with confusing references to multiple outside sources. As a practical matter, this subjects a grower attempting to comply with this Order to a confusing morass of ill-defined terms, overlapping geographic boundaries and multiple databases. The Farm Bureau and Potato Commission recognize the disproportionate burden placed on

MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

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growers who are attempting to understand and utilize the various tools referenced in the Order, and hereby request that the operation of the injunctive Order be delayed until the EPA develops a user-friendly, web-based system that offers one comprehensive database displaying the geographic scope of this Order for each chemical and which also takes into account possible overlapping ESUs for each listed species.

2. Reprioritize the EPA's effects determinations in order of those chemicals deemed critical to Washington agricultural industry and focus on those salmon ESUs where the most agricultural activity occurs

The Farm Bureau and Potato Commission respectfully submit the following summary of each chemical's use and relative importance to Washington State's agricultural industry, attached as Exhibit 3. This list was generated to serve as a starting point to reprioritize the EPA's effects determinations in future discussions. The Farm Bureau and Potato Commission suggest that the schedule of future effects determinations be reordered, so that those chemicals most critical to growers are given priority, and thereby limiting the extent of irretrievable loss. The current list is not prioritized in such a way as to minimize loss to growers. The reprioritized list would initially focus on those chemicals routinely applied by air and therefore subject to the 100-yard buffer zone, as well as those chemicals deemed critical to the orchard industry<sup>22</sup>. The Farm Bureau and Potato Commission suggest

For example, the EPA has yet to do a risk assessment for the use of 2,4-D. See Exhibit 8. 2,4-D is a general use herbicide used to control a variety of broadleaf weeds and is critical to dryland agricultural operations. Because 2,4-D must be applied aerially to maturing crops, growers are subjected to the 100-yard buffer zone. The nature of the target crops, hay and wheat for example, make ground application impractical. As all fields will need to be aerially treated to meet export standards, any land lying within the buffer zone will necessarily lie fallow.

that this issue be further explored through either the appointment of a special master or by submitting the issue to the mediation process. By reprioritizing the effects determinations using the information provided in Exhibit 3 as a starting point for discussions, the impact this injunctive Order has on Washington State's agricultural industry can thereby be minimized.

### 3. Create a categorical exclusion for the use of all herbicides

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Herbicides, fungicides, and insecticides all have different biochemical mechanisms as well as different physicochemical properties which cause these general categories of chemicals to behave differently in the environment. Felsot Decl. ¶ 28. In general, herbicides are much less toxic to aquatic species than insecticides. For example, differences among LC50s suggest that some herbicides subject to the Order are hundreds of times less toxic than the insecticides. Id. Therefore, a theoretical 1 ppb of a typical OP insecticide in water will have a very different biological significance than 1 ppb of most herbicides. For this reason, establishing the same buffer zone for herbicides as those established for insecticides is unnecessary.

The EPA has yet to issue an effects determination for some of the herbicides deemed critical to Washington State growers, including 2,4-D, bromoxynil, oxyfluorfen, and pendimethalian. See Exhibits 3 and 8. Several of these herbicides are especially critical to dryland crops, which, under this Order, prevents application within the 100-yard buffer zone. For example, 2,4-D is the second most commonly used herbicide in the state and is routinely applied by air within 300 feet of salmon-bearing streams in Washington State. Exhibit 3. As noted by the declarants who grow timothy hay in Kittitas County, dryland crops require

Obviously, depending on the particular land at issue, a 100-yard buffer zone would cause tremendous hardship to certain growers.

MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT

aerial applications of herbicides once the crop has reached a certain stage of maturity to ensure the crop meets export standards. Eslinger Decl. ¶ 6. The imposition of the 100-yard buffer zone has a tremendous impact on several of these growers. Likewise, oxyfluorfen is a critical herbicide, and is applied to 78% of Washington State's raspberries. Exhibit 3. As previously noted, because raspberries are a niche crop, eliminating the use of this herbicide within the buffer zones could have an impact on the national availability of this product. Because these herbicides are both critical to Washington agriculture and are generally much less toxic to aquatic organisms, the Farm Bureau and Potato Commission respectfully request that this Court modify its injunctive Order to allow the use of herbicides within the buffer zones according to the product's label pending an effects determination from the EPA. 4. stream

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## Limiting use of chemicals to times when salmon are actually in

The beginning of the salmon runs are both somewhat predictable and widely reported by the media. Therefore, the Farm Bureau and Potato Commission propose that, by limiting injunctive relief to coincide with the timing of the major salmon and steelhead runs, the scope of the Order can be limited within each salmonid ESU while still protecting the vast majority of salmon and steelhead. By limiting the injunctive Order in this way, a level of protection is afforded to salmonid species on a population level, thus ensuring the chemical applications are not jeopardizing salmon at the species level. The Farm Bureau and Potato Commission further suggest that the timing restrictions can be adequately disseminated to individual landowners via the EPA website, local agricultural extension offices, and the Intervenor organizations themselves. By limiting the effect of this Order to coincide with the timing of the major salmon ESU runs, the salmon will be protected at a

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species level while allowing growers an additional measure of assurance that their growing operations can continue with minimal impacts.

5. For those chemicals that the EPA assigns a "may effect" determination, include language in the order which allows chemical use if the EPA subsequently issues a 7(d) determination

The ESA places an additional substantive requirement on agencies, which only applies after formal consultation is initiated, but prior to the issuance of a Section 7(d) states:

After initiation of consultation required under subsection (a)(2) of this section, the Federal agency . . .shall not make any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of forcelosing the formulation or implementation of any reasonable and prudent alternative measures which would not violate section (a)(2) of this section, 16 U.S.C. §1536(d).

In analyzing this section, the courts have articulated a two-part test. A Federal District Court explains: [U]nder the express language of the statute, the federal agency is only prohibited form making those commitments which involve the following two elements: (1) an irreversible and irretrievable commitment of resources; (2) which foreclose the formulation or implementation of reasonable and prudent alternatives. Pacific Rivers Council v. Thomas, Civ. No. 92-1322-MA, 1994 WL 908600(D.Or. Oct. 20, 1994) at \*3. The Ninth Circuit has stated that, "non-jeopardizing agency action may take place during the consultation process in light of the protections of section 7(d) where the action will not result in substantive violations of the act." Southwest Center for Biological Diversity v. United States Forest Service, 307 F.3d 964, 973 (9th Cir. 2002) (withdrawn as moot). The Farm Bureau and Potato Commission request that, should the EPA issue a 7(d) determination for any of the active ingredients for which it has given a "may effect" determination, that the Order include a provision excepting the injunctive terms of relief during the consultation

period. This would provide growers with an additional measure of security during the period this injunctive Order is in effect.

#### IV. CONCLUSION

The existing blanket Order is neither scientifically warranted nor easily understood or implemented by landowners. Rather, the Order irreparably harms the same growers who have voluntarily reduced their chemical usage and improved salmon habitat. Because this Order can potentially remain in effect for several years, the Order adversely and irreparably impacts individual growing operations, county revenues, national availability, and the export market. These impacts have been imposed despite the Plaintiffs' failure to come forward with any evidence proving that modern agricultural practices are harming, let alone jeopardizing salmonid populations.

Modern agricultural practices cannot only coexist with salmonid populations, they can often protect and enhance salmonid populations. The Farm Bureau and Potato Commission respectfully request this Court review the terms of its injunctive Order in light of the evidence presented in this Motion. The Farm Bureau and Potato Commission also request that this Court vacate its prior Order imposing blanket buffer zones pending an EPA effects determination and subsequent consultation with NMFS. If the Court is unwilling to vacate its Order, the Farm Burcau and Potato Commission respectfully request this Court adopt the suggestions limiting the scope of the injunction.

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RESPECTFULLY SUBMITTED this day of March 2004.

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MOTION TO STAY AND MODIFY JANUARY 22,2004 ORDER AND MEMORANDUM IN SUPPORT